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Regulating the employment dynamics of domestic supply chains

Abstract

This paper sheds light on the role that the regulation of primarily domestic, rather than global, supply chains could play in protecting and enhancing standards of workplace health and safety, as well as employment standards more generally. The analysis presented confirms the potential relevance of such regulation in these regards. However, it also reinforces existing evidence pointing to the fact that only very rarely will market-related considerations on their own prompt purchasers to seek to directly influence the employment practices of their suppliers. The paper ends therefore by highlighting a number of key issues relating to the design of regulatory initiatives aimed at protecting and enhancing employment conditions within supply chains.

Keywords: supply chains, regulation, health and safety, labour standards

Introduction

Over the last three decades or so business-to-business supply relations have taken on a growing (and, in historical terms, renewed) significance as large public and private sector organisations have chosen to place a greater emphasis on management by ‘contracting’ rather than through ‘internal hierarchies’ (Williamson, 1975 and 1985). Research shows this shift has been commonly associated with a process of employment degradation as large purchaser organisations take advantage of their superior market power to secure financially advantageous supply arrangements (Cunningham et al, 2013; Wright and Lund, 2003; James and Lloyd, 2008; Walters and James, 2011; Rubery et al, 2003). Such findings have in turn served to generate much concern across the political spectrum about the working conditions of those in the developing world labouring at the end of global supply chains (Braithwaite and Drahos, 2000; O’Rourke, 2003; Rodriguez-Garavito, 2005; Vogel, 2008).

In contrast, the adverse consequences of outsourcing and sub-contracting within developed economies have attracted much less comment. This is notwithstanding evidence demonstrating the extensiveness these consequences across developed economies. It is also despite the well recognised difficulties associated with implementing and enforcing labour standards within global supply chains and the related obvious point that the regulation of such standards is easier at the domestic, national level (Gibbons, 1998): a point which means that while the case for the regulation of supply chains stretching from developed to developing contexts may be informed by a stronger moral imperative, regulatory action at the level of the national state to counter the adverse employment effects of supply chains must be viewed as being more practically viable.

It is against this backcloth that the present paper focusses attention on the regulation of domestic, rather than global, supply chains aimed at protecting and enhancing standards of workplace health and safety. In doing so, it not only considers the role and challenges of such regulation but also utilises this analysis to consider the place and design of employment-related supply chain regulation more widely.

The paper's analysis commences by using existing evidence to highlight the way in which supply chains do impact adversely on health and safety standards within developed economies and the value of therefore taking action to combat their negative effects. Following this, the paper considers in turn the potential use of supply chains to counter the occurrence of such harm, the challenges that confront attempts to encourage their usage in this way, and the factors that facilitate such utilisation. It then sheds further light on these issues through drawing upon recent research examining health and safety management within supply chains in the construction and maritime industries. Lastly, in light of these analyses, the paper discusses their implications for the role and nature of regulatory initiatives aimed at improving labour conditions in supply chains.

Labour standards and domestic supply chains: The case of workplace health and safety

The view that (international) labour standards were needed to combat the risk of competitive pressures driving down employment conditions was expressed by a range of social thinkers from as early as the 19th century (see Heintz, 2002: 13). Commencing in 1919 with the adoption of the first six International Labour Organisation (ILO) Conventions, a complex body of such standards has subsequently evolved. The standards so promulgated vary enormously in terms of subject matter, with a useful distinction here being between 'process standards/rights' concerning such matters as freedom of association, and the right to collective bargaining, and 'substantive or outcome' ones relating to matters like paid holidays, maternity leave and minimum or living wages (Luce, 2005: 3; Alston, 2004: 487). The target of the standards developed also varies between a focus, notably with those developed by the ILO, on influencing the domestic laws and practices of national states and attempts, as with the OECD guidelines on multinational enterprises, to shape the international business activities (and therefore supply chain practices) of multinational/global trading corporations.

The development of such international standards has reflected a range of influences. These have obviously included humanitarian or welfare orientated concerns. However, they have further included both micro- and macro- economic ones relating in the former case to a desire on the part of multinationals to protect and enhance their images and in the latter to protectionist pressures within developed economies aimed at limiting the ability of developing ones to compete on the basis of cheaper labour costs (Luce, 2005; Heintz, 2002). This combination of humanitarian, reputational and protectionist motives has tended to tie the issue of influencing the supply chain practices of multinationals to that of enhancing the working conditions of workers labouring at the end of global ones within developing economies. Yet while existing evidence indicates that the way in which supply chain relationships impact on the employment arrangements of supplier organisations within developed countries can vary considerably, it also points to the fact that their effects are all too often negative (Weil, 2009).

In the case of workplace health and safety, international research evidence on the effects of outsourcing has produced remarkably consistent findings in this regard. For example, a 2008 review of 25 such studies found poorer occupational health and safety (OHS) outcomes to be

evidenced in all but two of them (Quinlan and Bohle, 2008). Similarly, another review, focussing on the consequences for health and safety of the increased importance of supply chains in modern business practices, found that a large majority of the studies reviewed identified poorer OHS management and outcomes as a result of outsourcing (Quinlan et al, 2001).

Available sector-based evidence points in the same broad direction. Numerous studies have, for example, identified the widespread use of sub-contracting and its often poor management as important contributors to the occurrence of accidents and associated injuries in the construction industry. In particular, financial and time pressures impinging on sub-contractors, the lower levels of supervision and training provided to sub-contractor personnel, as well as poor levels of communication with them, and the problems of co-ordinating the activities of sub-contractors have all been highlighted as important factors adversely impacting on health and safety management on construction sites (Mayhew and Quinlan, 1997; Rebitzer, 1995; Kochan et al, 1994; Dawson et al, 1985; Donaghy, 2009; Johnstone et al, 2001).

Studies undertaken in the food production and processing sector similarly demonstrate how the dynamics of supply chains can create working environments within supplier organisations that increase risks to worker health and safety (Wright and Lund, 2003). They have, for example, revealed how supply chain relationships between supermarkets and their suppliers can lead to increased casualisation and agency working, unstable patterns of work and working time and work intensification, with one study concluding that:

...supermarkets add to the difficulties of managing health and safety as cost pressures and delivery requirements push companies towards using agency workers, increasing the pace of work and utilizing long working hours. (James and Lloyd, 2008).

A recent study undertaken by the British Equality and Human Rights Commission (2010) on recruitment and employment in the meat and poultry processing sector serves to reinforce such conclusions. Thus, in finding evidence of the widespread poor treatment of agency workers, including in respect of health and safety, it found that the main reason for the use of such workers was to meet the demands of supermarkets. It went on to observe how a number of agencies felt that current profit margins did not allow for compliance with labour laws because of supermarkets 'driving their prices' and more generally noted that 'the downward price pressures exerted by supermarkets and the way they went about ordering products from suppliers brought about conditions that supported unethical traders'.

A considerable body of evidence also more specifically highlights that the types of work changes commonly resulting from supply chain pressures are linked to a variety of adverse health and health-related outcomes, including increased incidence of cardiovascular disease, burnout and depression (Ferrie et al, 2002; Benach et al, 2002). Thus, changes where such linkages have been identified include greater job insecurity, poorer pay, lowered access to training among precarious workers, and less control over working time (see e.g. Aronsson et al, 2002; Bohle et al, 2004), while the reasons identified for them have included competitive

pressures on subcontractors (resulting in corner-cutting, work intensification and excessive hours), and disorganisation (leading to, for example, more attenuated control systems in the workplace, under-resourced operators and undermined regulatory control) (Mayhew et al, 1996).

Countering health and safety adversity

There would then seem no doubt that supply chain dynamics can, for a variety of reasons, impact negatively on workplace health and safety standards within supplier organisations. At the same time, the size and power asymmetries they frequently embody has stimulated policy interest in the potential role that influential actors in them could play in countering such a tendency. This interest exists alongside evidence showing that attempts are at times made by the purchasers of goods and services to influence health and safety within supplying organisations through one or more of three types of action (Walters and James, 2011). First, the utilisation by ‘purchasers’ of procurement strategies under which health and safety standards are used as a basis for selecting contractors, as well as the extension of these to the imposition of requirements relating to the general management of health and safety by suppliers, such as the carrying out of risk assessments and communication within multi-contractor/subcontractor work sites. Second, industry level certification schemes aimed at ensuring the competencies of contracting organisations and those working for them. Third, ‘product related initiatives’ focused around the supply of materials for use at the workplace that are undertaken by trade/industry bodies, as well as individual supplier organisations.

Research also highlights the circumstances in which organisations may seek to so influence the internal operations of supplier organisations, both in general and in respect of labour related matters in particular, as well as the factors which more generally shape the nature of purchaser-supplier relationships. This evidence suggests that purchasers are most likely to intervene in the internal operations of suppliers where the goods and services to be supplied are of a complex and critical nature and hence potentially give rise to significant risks of supply failure and business damage (Cousins and Lawson, 2007; Heide and John, 1990).¹ In doing so, it therefore further suggests that market-based business motivations alone will only rarely encourage the proactive use of supply chains to improve supplier health and safety standards. Indeed, in line more generally with the way that legal and other sources of external institutional norms have been found to influence the nature of supply relationships (see e.g. Lane, 1997; Marchington and Vincent, 2004; and Sako, 1992), the global supply chain literature suggests that such interventions on the part of purchasers are most likely to occur where they face significant financial and reputational risks arising from potential legal liabilities, and the campaigning and monitoring activities of trade unions, non-governmental organisations and other social interesting groups operating beyond the immediate supply relationship (see e.g. Braithwaite and Drahos, 2000; O’Rourke, 2003; Rodriguez-Gravito, 2003).

At the same time, it would seem that the effectiveness of such pressures is likely to situationally and contextually vary. Thus, Lakhani et al (2013), drawing on the varying types of global supply chains distinguished by Gereffi and colleagues (Gereffi et al, 2005), have

developed a configurational framework in which they more widely postulate a set of employment relations implications for each of them. In doing so, they suggest, in common with other analysts (Riisgaard and Hammer, 2011; Locke et al, 2007), that the influence of public campaigns, union strategies and multinational initiatives to improve labour standards in such chains will vary between the different types of supply chains. For example, it is argued that they are likely to meet with less success in the case of chain configurations marked by ‘low lead firm influence’ and correspondingly high reliance on market based coordination.

Care should also be taken not to understate the challenges of developing such external sources of pressure. Thus, as will be discussed further below, the development of effective legally-based regulatory frameworks is far from a simple task. Meanwhile, the capacity of trade unions to limit the outsourcing of work and to influence the terms and conditions of those undertaking outsourced work at the enterprise and workplace levels (see e.g. Wright and Brown, 2013) will often be limited given the declines in membership and power they have experienced in most developed economies over the last three decades (Schnabel, 2013): constraints that in the UK have been compounded by the presence of legislative provisions that create legal liabilities in respect of industrial action taken in support of strategies of this type.

Lessons from construction and shipping

Against this conceptual and empirical backcloth, we now discuss findings obtained in a recent study of supply chain relations in the construction and maritime industries (Walters et al 2012) to shed more direct light on the circumstances under which supply chains are used to positively influence health and safety standards in supplier organisations. We look first at the construction industry findings and then those from the maritime sector. In each case, brief outlines of the key features of the market and institutional contexts of the supply chains concerned are initially provided, before attention is turned to an exploration of our findings.

Construction

Market and institutional context

Sub-contracting, and the supply chains in which it is embedded, constitutes a central feature of British construction work. This sub-contracting operates against the backcloth of employment which is often short-term and informal and a labour market that is (increasingly) characterised by various forms of contingent employment, including agency working and both bogus and genuine self-employment (Forde et al, 2009; UCATT, 2008)). It also does so in a sector that is dominated numerically by small and micro enterprises but where approximately a quarter of the industry’s output is generated by fewer than 125 large companies that operationally dominate much of the outsourcing which occurs in it (Donaghy, 2009). As a result, the industry very much fits with Weil’s description of ‘fissured’ employment contexts – that is ones in which powerful lead firms shape the product market conditions while to a large extent been separated from the employment of the workers who produce goods and services for them (Weil, 2011 and 2014).

These features of the industry exist alongside a regulatory framework for workplace health and safety which does extend to cover the management of sub-contracting. Thus, under section 3(1) of the Health and Safety at Work Act 1974 those conducting an undertaking are required to ensure, so far as reasonably practicable, the health and safety of persons not in their employment.² In addition, the supporting Construction (Design and Management) Regulations (COSHH) 2007, in imposing duties on construction client and designers, can be seen to have a strong supply chain focus, while the management of sub-contract arrangements has constituted an important focus of the Health and Safety Executive's strategies for raising health and safety standards in the industry (Walters et al, 2012).

Construction projects

The two construction case studies were focussed on exploring the same principal contractor's role respectively in the development of the Olympic Park and in a large inner city development and regeneration scheme, (which we have called the Forum Development Project). As detailed in a previous account (James et al, 2014), in the case of the Olympic Park, data were gathered from the client and principal contractor, as well as six second and third tier companies engaged in a combination of engineering and landscaping work, through interviews and group discussions involving 27 people: five from the head of the supply chain; nine from the Tier 1 contractor; eight from the Tier 2 level; and seven from the Tier 3 level. Those for the second project came again from the client and a principal contractor, along with two Tier 2 sub-contractors, a labour supply agency and a multi-utility company, and a Tier 3 civil engineering firm, and from a total of 10 people.

The data collected indicated clearly that within each of the subcontracting supply chains safety had been managed effectively, thereby echoing other evidence from the construction industry internationally showing that such strategies can yield positive results (Deakin and Koukiadaki, 2009; European Agency for Safety and Health at Work, 2000). In both cases these positive outcomes were seen to have most immediately flowed from the presence of supportive attitudes and actions on the part of clients and principal contractor that existed alongside a capacity on their part to effectively operationalise them. It was also, however, apparent that these attitudes and actions were in large part a product of several important external contextual influences.

The principal contractor's willingness to influence and monitor the way in which its sub-contractors managed safety reflected a belief that a good reputation in the area was important to the obtaining of new contracts; a financial motivation that generated similar ones within the company's (smaller) sub-contractors as a result of the market power it possessed in relation to them. These commercial motivations had moreover not simply emerged 'spontaneously' from the operation of market forces. Rather, they in part stemmed from the scale of the projects that were being undertaken and the public profiles and related regulatory pressures they consequently faced. These external institutional pressures appeared, in turn, to be the product of an evolving process of regulatory and related political influences arising from long-standing criticisms of the construction industry's safety performance and the way in which the HSE and the major companies in the industry had sought to respond to them in

the context of the subsisting regulatory framework for health and safety, most notably the COSHH regulations. In effect this process of response had led to a common understanding among these companies, as well as the HSE, regarding what constituted ‘good practice’ in the management of construction projects, including in respect of how sub-contractors were managed. This ‘good practice’, the findings suggest, had acted to structure market, regulatory and organisational expectations regarding the competencies that tendering companies are expected to demonstrate and how, more generally, they are managed.

Maritime industry

Market and institutional contexts

Our case studies in the maritime industry focused on its oil tanker and container sectors. In common with the industry more widely both of these sectors are subject to both global and national regulatory arrangements for occupational health and safety. A range of international standards exist, including, for example, the International Safety Management (ISM) Code and the International Labour Organisation’s Marine Labour Convention. In addition, these standards operate alongside essentially nation-based regulatory frameworks and supporting inspection regimes established by the various Port and Flag States. As a result, the industry, although a globalised one, is the subject of a combination of international and domestic regulatory arrangements. The rigour of these last systems of regulation vary considerably and tend to be ‘ship’ focussed and hence for the most part silent with regard to the operation of the systems of client chartering that dominate commercial relations in the industry.

The nature of supply chain relations, meanwhile, differ markedly across the different sectors of the industry. This is perhaps particularly true with regard to the two of interest here, namely the tanker and container trades. Thus, while both are similarly marked by a combination of ship owners and charterers, third party ship management companies and labour supply agencies, the central relationships between owners and charterers generally differ significantly. So, whereas in the container industry the market place is made up of a vast number of individual chartering clients, the oil tanker one is dominated by the major oil companies (‘the oil majors’). Moreover, these companies have in effect reinforced the monopsonistic nature of the oil tanker trade through the establishment of a representative body, the Oil Companies International Marine Forum (OCIMF), which, has created its own private system of health and safety regulation which parallels those operating through Port and State Control.

The tanker trade

In order to explore supply chains in this sector, two extensive qualitative data sets collected for the purposes of PhD investigations (Bhattacharya, 2009; Xue, 2012) were drawn upon to examine health and safety management practices on board four oil and chemical tankers³ Two of the companies concerned were large global traders and the others were Chinese, trading on Asian routes. Some of the companies involved operated chemical tankers as well as oil tankers and, in the case of the Chinese companies, research voyages were conducted on these vessels as well as on oil tankers. However, since the seafarers on these vessels had

usually also sailed on oil tankers, their responses to questions involving supply chain effects were generally based on their experiences in both contexts. In total the data sets utilised encompassed interviews with nearly 120 seafarers while on board eight different vessels, and 23 shore-based managers in the four companies responsible for operating these vessels.

The findings highlighted how to be able to compete for contracts with the oil majors, either directly or indirectly, tanker companies had to ensure their ships were maintained and operated in line with standards laid down by the OCIMF. They further revealed how compliance with these standards was monitored through a rigorous inspection system and the way in which the results of inspections were made available to member companies of the OCIMF and so could influence which ship operators they chose to do business with. Indeed, it was found that cases of identified non-compliance could potentially lead to an entire fleet of tankers being denied business, even where the non-compliance concerned related to a single vessel (see Walters et al 2012; Walters and Bailey 205-207).

The interviews invariably confirmed the powerful influence of the oil companies' requirements on the form and content of safety management practice on board vessels in the tanker trade. At the same time, while both seafarers and their managers clearly found the requirements of the oil majors to be powerful (monopsonistic) influences on their arrangements for health and safety management, they did not regard them as a substitute for surveillance through Flag and Port State Control. In effect therefore the tanker trade was found to be marked by a combination of mutually supporting systems of private and public regulation (Mayer and Gereffi, 2010) that had been developed in response to the potential scale of the economic, human and environmental consequences associated with accidents in the sub-sector. Furthermore, as Walters and Bailey (2013:201-212) have observed, these two forms of regulation have in reality co-evolved, with the nature of the former, for example, notably reflecting important elements of the latter.

Container case study

The second maritime case study concerned a cluster of companies involved with transporting containers and cars, connected to a ship management company based in the UK. Business relations involved in the ownership, management and operation of its ships were somewhat complicated, but fairly typical of those generally found in the container trade. The ship, on which interviews were conducted during one of its transatlantic voyages, was managed by the ship management company but chartered by a second company, which took responsibility for cargo management and in relation to cargo planning had a direct relationship with the vessel. This company and the ship itself were owned by a large shipping line that, however, played little part in any of these activities. During the voyage all of the ship's senior officers, and a representative selection of junior officers and ratings were interviewed, 14 interviews in all. Interviews were also conducted in the offices of the ship management company, where eight senior staff responsible for procurement, safety management, contract compliance, auditing and ship inspections were interviewed.

The nature of the business relations between the companies and those whose goods they were transporting were quite different to those between the oil majors and independent tanker companies described previously. In the container and car shipping undertaken by the ship management company and the cargo operator, goods belonging to a considerable range of clients could be loaded and carried on board their vessels in any one voyage. The safety interests of the smaller of these clients made little impact on the management and crew of the vessels, while those shown by larger clients were mainly restricted to the conditions under which their goods were transported. There was consequently for the most part no obvious pressure from the clients whose goods were being shipped for either the ship operator or the ship management companies to conform to any requirements concerning the management of health and safety on board the vessels shipping them.

As discussed in detail by Sampson et al (2014), this situation was found to reflect two main factors. One was that, beyond the safeguarding of their goods, there was no immediate or obvious business or regulatory reason why it was in clients' business interests to require particular standards of OHS management on board the ships transporting them. The second was that the structure of the supply chain in question was too diffuse and the position of the clients whose goods were being shipped too remote, to allow processes such as the procurement and monitoring activities found in the oil tanker trade to be used effectively to influence either the ship operators and managers or the seafarers working on board the vessel we studied.

Nevertheless, as Walters et al (2014), point out, this was a relatively narrow expression of a more complex reality since effective safety management was regarded by both the personnel of the ship management company and the seafarers as implicit in the maintenance of long-standing business relationships. So, while supply chain relations with the clients did not themselves provide much in the way of direct influence on the OHS management standards that applied on board, they did influence them indirectly as a result of the wider institutional framework of public regulation (and inspection) in which the business relations of the companies involved were situated. In particular, because the results of inspections were made publicly available, managers were only too aware of the potential for a bad business image to be generated as a result of inspections undertaken by the various Port State and Flag State authorities, particularly as the ship operated under a relatively rigorous Flag State (Sweden) and came into frequent contact with a Port State (United States) noted for its vigilance.

Discussion

In the three contexts studied - large building projects, oil tankers and container ships – it was found that the positive attitudes towards the maintenance of good, or at least relatively good, health and safety standards identified reflected the existence of mutually reinforcing combinations of market and institutional influences. In each case a crucial element within these combinations was the presence of a substantial degree of legally-based regulation, along with the existence of agencies – the HSE and Flag and Port States – that could monitor and enforce regulatory compliance. In each case also, however, this element existed alongside others that served to facilitate (and at times amplify) its impact.

In construction, the monopsonistic nature of the principal contractor market relating to large building projects provided a platform whereby the HSE could work with the companies concerned to create a set of sector-wide expectations concerning how health and safety should be managed within them; expectations that effectively served to make successful tendering dependent on demonstrating to clients that these would be met. In a somewhat similar vein, the small group of 'oil majors' had responded to regulatory and wider social pressures, notably in respect of environmental issues, to establish their own supplementary system of private regulation. Here, however, more direct financial motivations seemed to have played a more substantial role given the economic (as well as reputational) risks associated with a major accident at sea. Finally, in the case of the container ship studied, it was apparent that the ship management company was responsive to the scrutiny of the Flag state as well as keen to avoid falling foul of Port and State Controls, both against the backcloth of business strategy of working at 'the top end of the market'. This attitude, however, also reflected the fact that the ship operated under the comparatively strict inspection regimes of the Swedish flag and U.S coastguard: connections that more generally highlight the very contingent nature of the positive supply chain effects identified across the 'cases' studied.

Overall, the findings, particularly when considered in conjunction with the earlier review of literature, lend strong support to the argument that regulation does have a role to play in countering the adverse employment effects of supply chains in developed economies. In doing so, they raise the obvious question of how this regulation could be most usefully progressed.

One potential option in this regard would be to develop a set of general, or generic, obligations on key supply chain actors that would be enforced through inspections and enforcement actions taken by a relevant regulatory agency. A good example of such an approach is provided by the innovative provisions of Australia's harmonised Work Health and Safety Act (WSA) that place the primary duty of care on a person in control of a business or undertaking (PCBU) and define a 'worker' (to whom this duty is owed) as including those who carry 'out work in any capacity for a person conducting a business or undertaking, including work as -

- (a) An employee; or
- (b) A contractor or subcontractor; or
- (c) An employee of a contractor or subcontractor; or
- (d) An employee of a labor hire company who has been assigned to work in the person's business or undertaking; or
- (e) An outworker; ..."

By extending the scope of the statutory obligations of those in control of a business or undertaking to wherever work is performed on its behalf, these provisions therefore serve to establish an economy-wide framework of health and safety supply chain regulation (Harpur

and James, 2014; Johnstone, 2011). Such an approach could obviously be extended to cover other areas of employment regulation. It is one, however, that in reality is likely to leave responsibility for enforcement residing with already under-resourced inspectorates; a potentially highly significant weakness in the light of evidence indicating that organisations are more likely to follow through on self-regulatory commitments of the type laid down under the Act ‘when they (and their competitors) are subject to heavy regulatory surveillance’ (Short and Toffel, 2010: 361) and face meaningful threats of legal liability or reputational damage (Tombs and Whyte, 2013).

This enforcement concern can be noted to echo debates in the wider regulatory and socio-legal literature regarding the problems that surround traditional command and control methods of achieving corporate legal compliance, and to link into arguments within these that such regulation needs to be more ‘responsive’ and ‘smarter’ (Ayres and Braithwaite, 1992; Gunningham and Sinclair, 1999). That is to take on forms which are capable of more effectively bridging the gap between the state and the market by harnessing intermediary players and processes and acting in reflexive ways to promote various types of regulated self-regulation (Teubner, 1986; Estlund, 2010).

Given how the findings reported earlier found positive, proactive supply chain management to be associated with combinations of mutually supporting market and institutional force, these lines of argument and debate further point to the need for regulatory frameworks that create market vulnerabilities and incentives on the part of duty holders which are both supportive of high levels of compliance and resource efficient. In the authors’ view such considerations suggest the adoption of regulatory strategies encompassing three key features. First, a focus on sectors, such as social care, food processing, clothes manufacturing and parts of retailing (see e.g. Weil, 2009; Trades Union Congress, 2009), where the adverse employment effects of supply chains have been found to be significant and the work of Gerreffi and colleagues (2005) and Lakhani et al (2013) suggests that effective regulatory interventions are possible as a result of their domination by large, (and reputationally vulnerable) powerful actors. Secondly, the establishment in these of legislative frameworks which, in common with a small number of examples internationally (see Weil and Mallo, 2007; James et al, 2007; Nossar et al, 2004; Rawlings and Kaine, 2012; Harpur, 2008), impose obligations relating to the establishment of complementary systems of private regulation (Mayer and Gereffi, 2010; Locke et al, 2013).⁴ Finally, the enabling of interested third parties, like trade unions, to initiate enforcement action and in this way overcome the resource constraints commonly associated with state-based forms of regulatory oversight.⁵

These observations and suggestions can, in turn, be seen to have important implications for industrial relations scholars and the theoretical frameworks. Flowing from the work of such academics as Dunlop (1993), Clegg (1979) and Hyman (1975), the field of industrial relations has long been seen to be centrally concerned with the regulation of employment. For the present authors such a conceptual focus remains a valid one. However, they also believe that its theoretical exploration could be usefully enriched by more engagement, both conceptually and empirically, with theory and debates relating to the regulation of employing organisations more generally, and, in particular, to those surrounding its ‘responsive’ and

‘reflexive’ forms. Thus, against the backdrop of current more fragmented patterns of employment, including those arising from the growing importance of management by contracting, there would seem an urgent need for those working in the field to engage in much more detailed and refined explorations of how employment rights and standards can be best protected and enhanced.

Conclusion

The adverse employment effects flowing from the trading dynamics within commercial supply chains have generated long-standing concerns in respect of those working at the end of global ones in developing economies, and much interest in taking action to counter them. These concerns are undoubtedly well placed. They have though existed alongside a corresponding tendency to ignore the parallel supply chain effects in developed economies and the regulatory issues they raise; notwithstanding that these are also often negative and that remedial regulatory action must be viewed as a potentially more viable proposition in such contexts.

This present paper has consequently focussed attention on the regulation of domestic, rather than global, supply chains aimed at protecting and enhancing standards of workplace health and safety. In doing so, it has sought not only to shed light on the role of, and challenges confronting, such regulation but to extrapolate the analysis provided to embrace a consideration of the place and design of employment-related supply chain regulation more widely.

Overall, the analysis presented confirms that in certain circumstances such chains can operate in a way which is supportive of good standards of worker protection. At the same time, the available evidence also suggests that market forces will rarely lead to such outcomes in the absence of supportive external institutional forces that motivate power supply chain purchasers to act in ways that are compatible with their occurrence. The paper has ended therefore by highlighting a number of key issues relating to the design of regulatory initiatives embodying motivation forces of this type.

References

- Alston P (2004) ‘Core labour standards’ and the transformation of the international labour rights regime. *European Journal of International Law* 15(3): 457-521.
- Ayres I and Braithwaite, J (1992) *Responsive Regulation: Transcending the Deregulation Debate*. New York: Oxford University Press.
- Bhattacharya, S (2009) *The Impact of the ISM Code on the Management of Occupational Health and Safety Initiatives in Shipping*. PhD Thesis. Cardiff: Cardiff University

Benach J, Amable M, Muntaner, C and Benavides FG (2002) The consequences of flexible work for health: Are we looking in the right place? *Journal of Epidemiology and Community Health* 56: 405-406.

Bohle P, Quinlan M, Kennedy D and Williamson A (2004) Working hours, work-life conflict and health in precarious and permanent employment. *Rivista de Saude Publica* 38: 19-35.

Braithwaite J and Drahos P (2000) *Global Business Regulation*. Cambridge: Cambridge University Press.

Clegg, HA (1979) *The Changing System of Industrial Relations in Great Britain*. Oxford: Blackwell.

Cousins P and Lawson B (2007) Sourcing strategy, supplier relationships and firm performance: An empirical investigation of UK organisations. *British Journal of Management* 18: 123-137.

Cunningham I, Hearne G and James P (2013) Voluntary organisations and marketisation: A dynamic of employment degradation. *Industrial Relations Journal* 44(2): 171-188.

Dawson S, Clinton A, Bamford M and Willman P (1985) Safety in construction: Self regulation, industrial structure and workforce involvement. *Journal of General Management* 10: 21-38.

Deakin S and Koukiadaki A (2009) Governance processes, labour-management partnership and employee voice in the construction of Heathrow Terminal 5. *Industrial Law Journal* 38(4): 365 – 389.

Donaghy Report (2009) *One Death is too Many. Inquiry into the Underlying Causes of Construction Fatal Accidents*. London: Report to the Secretary of State for Work and Pensions.

Dunlop JT (1993) *Industrial Relations Systems*, Revised Edition. Boston: Harvard Business School Press Classic.

Equality and Human Rights Commission (2010) *Inquiry into Recruitment and Employment in the Meat and Poultry Processing Sector*. Manchester: Equality and Human Rights Commission.

Estlund, C (2010) *Re-governing the Workplace: From Self-regulation to Co-regulation*. New Haven, CT: Yale University Press.

European Agency for Safety and Health at Work (2000) *Occupational Health and Safety in Marketing and Procurement*. Luxembourg: Office for Official Publications of the European Communities.

Ferrie JE, Shipley MJ, Stansfeld SA and Marmot MG (2002) Health effects of chronic job insecurity and change in job security on self-reported health, minor psychiatric morbidity,

physiological measures and health related behaviours in British civil servants: The Whitehall II Study. *Journal of Epidemiology and Community Health* 56(6): 450-454.

Forde C, MacKenzie R and Robinson A (2009) 'Built on shifting sands: Changes in employers' use of contingent labour in the UK construction sector'. *Journal of Industrial Relations* 51(5): 653-667

Gereffi G, Humphrey J and Sturgeon T (2005) The governance of global value chains. *Review of International Political Economy* 12(1): 78-104.

Gibbons S (1998) *International Labour Rights – New Methods of Enforcement*. London: Institute of Employment Rights.

Gunningham N and Sinclair D (1999) 'Designing Smart Regulation'. In: Hutter B (ed) *A Reader in Environmental Law*. Clarendon Press, Oxford, pp.305-334

Hardy J and Howe J (2009) Partners in enforcement? The new balance between government and trade union enforcement of employment standards in Australia. *Australian Journal of Labour Law* 22: 306-336.

Hardy J and Howe J (2014) Addressing employer non-compliance in complex supply chains: A review of regulatory innovations by the Fair Work Ombudsman. Paper presented at the *Journal of Industrial Relations Special Issue Symposium: Supply Chains, HRM Practices and Labour Standards*. University of Technology Sydney Business School. 10 February.

Harpur P (2008) Clothing manufacturing supply chains, contractual layers and hold harmless clauses: How OHS duties can be imposed on retailers for the safety of outworkers. *Australian Journal of Labour Law* 21: 316-338.

Harpur P and James P (2014) The shift in regulatory focus from employment to work relationships: Critiquing reforms to Australian and UK occupational safety and health laws. *Comparative Labor Law and Policy*.

Heide J and John G (1990) Alliances in industrial purchasing: The determinants of joint action in buyer-supplier relationships. *Journal of Marketing Research* 27: 24-36.

Heintz J (2002) *Global Labor Standards: Their Impact and Implementation*. Working Paper 46, Political Economy Research Centre, University of Massachusetts.

Hyman, R (1975) *Industrial Relations: A Marxist Introduction*. Basingstoke: Macmillan.

James P, Johnstone R, Quinlan M and Walters D (2007) Regulating supply chains to improve health and safety. *Industrial Law Journal* 36(2): 163-187.

James P, Walter D, Sampson, H and Wadsworth, E (2014) Protecting workers through supply chains: Lessons from two construction case studies. *Economic and Industrial Democracy*. DOI: 10.1177/0143831x14532296.

James S and Lloyd C (2008) Too much pressure? Retailer power and occupational health and safety in the food processing industry. *Work, Employment and Society* 22(4): 1–18.

Johnstone R (2011) ‘Dismantling worker categories: The primary duty of care and worker consultation, participation and representation in the model Work Health and Safety Bill 2009’, *Policy and Practice in Health and Safety*, 9(2), 91-108.

Johnstone R, Mayhew C and Quinlan M (2001) Outsourcing risk? The regulation of health and safety where subcontractors are employed? *Comparative Labor Law and Policy Journal* 22 (3-5): 351-394.

Kochan T, Smith M, Wells J and Rebitzer J (1994) Human resource strategies and contingent workers: the case of safety in the petrochemical industry. *Human Resource Management* 33(1): 55–77.

Lakhani T, Kuruvilla S, and Avgar A (2013) From the firm to network: Global value chains and employment relations theory. *British Journal of Industrial Relations*, 51(3): 440-472.

Lane C (1997) The social regulation of inter-firm relations in Britain and Germany: Market rules, legal norms and technical standards. *Cambridge Journal of Economics* 21: 197-215.

Locke R, Fei Qin F and Brause A (2007) Does monitoring improve labor standards? Lessons from Nike. *Industrial and Labor Relations Review* 61(1): 3-31.

Locke R, Rissing B and Timea P (2013) Complements or substitutes? Private codes, state regulation and the enforcement of labour standards in global supply chains. *British Journal of Industrial Relations* 51(3): 519-552.

Luce S (2005) *The Case for International Labour Standards: A “Northern” Perspective*. IDS Working Paper 250. Brighton: University of Sussex.

Marchington M and Vincent S (2004) Analysing the influences of institutional, organizational and interpersonal forces in shaping inter-organizational relations. *Journal of Management Studies* 41(6): 1029–1056.

Mayer F and Gereffi G (2010) Regulation and economic globalisation: Prospects and limits of private governance. *Business and Politics* 12(3): 1-25.

Mayhew C and Quinlan M (1997) Subcontracting and occupational health and safety in the residential building industry. *Industrial Relations Journal* 28(3): 192–205.

Mayhew C, Quinlan M and Bennett L (1996) *The Effects of Subcontracting/Outsourcing on Occupational Health and Safety*. UNSW Studies in Australian Industrial Relations No.38. Sydney: University of New South Wales.

Nossar I, Johnstone R and Quinlan, M (2004) Regulating supply-chains to address occupational health and safety problems associated with precarious employment: The case of home-based clothing workers in Australia. *Australian Journal of Labour Law* 17(2): 137-160.

O'Rourke D (2003) Outsourcing regulation: analysing non-governmental systems of labour standards and monitoring. *The Policy Studies Journal* 31: 1–29.

Quinlan M and Bohle P (2008) Under pressure, out of control or home alone? Reviewing research and policy debates on the OHS effects of outsourcing and home-based work. *International Journal of Health Services* 38(3): 489–525.

Quinlan M, Mayhew C and Bohle P (2001) The global expansion of precarious employment, work disorganisation and occupational health: A review of recent research. *International Journal of Health Services* 31: 335–414.

Rawling M and Kaine S (2012) Regulating supply chains to provide a safe rate for road transport workers. *Australian Journal of Labour Law* 25: 237–257.

Rebitzer J (1995) Job safety and contract workers in the petrochemical industry. *Industrial Relations* 34(1): 40–57.

Riisgaard L and Hammer N. (2011) 'Prospects for labour in global value chains: Labour standards in the cut flower and banana industries', *British Journal of Industrial Relations*, 49(1): 168–190.

Rodríguez-Garavito CA (2005) Global governance and labor rights: Codes of conduct and antisweatshop struggles in global apparel factories in Mexico and Guatemala. *Politics and Society* 33(2): 203–233.

Rubery J, Cooke F, Earnshaw J and Marchington M (2003) Inter-organisational relations and employment in a multi-employer environment. *British Journal of Industrial Relations* 41(2): 265–289.

Sako M (1992) *Prices, Quality and Trust: Inter-firm Relations in Britain and Japan*. Cambridge: Cambridge University Press.

Sampson H, Walters D, James P and Wadsworth E (2014) Making headway? Regulatory compliance in the shipping industry. *Social and Legal Studies*. DOI:10.1177/0964663914529684

Schnabel C (2013) 'Union membership and density: Some (not so) stylized facts and challenges', *European Journal of Industrial Relations*, 19(3): 255–272.

Short JL and Toffel MW (2010) Making self-regulation more than merely symbolic: The critical role of the legal environment. *Administrative Science Quarterly* 55(3): 361–396.

Teubner G (1986) 'After legal instrumentalism? Strategic models of post-regulatory law'. In: Teubner G (ed) *Dilemmas of Law in the Welfare State*. Berlin: De Gruyter, pp.299–326.

Tombs S and Whyte D (2013) The myths and realities of deterrence in workplace safety regulation. *British Journal of Criminology* 53: 746–763.

Trades Union Congress (2009) *Hard Work, Hidden Lives: The Full Report of the Commission on Vulnerable Work*. London: Trades Union Congress.

Union of Construction, Allied Trades and Technicians (2008) *The Evasion Economy. False Self-employment in the UK Construction Industry*. London: UCATT.

Vogel D (2008) Private global business regulation. *Annual Review of Political Science* 11: 261-282.

Walters D and James P (2011) What motivates employers to establish preventive management arrangements within supply chains? *Safety Science* 49(7): 988-994.

Walters D, Wadsworth E, Sampson H and James P (2012) *The Limits of Influence: The Role of Supply Chains in Influencing Health and Safety Management in Two Sectors*. Leicester: Institution of Occupational Safety and Health.

Walters D and Bailey N (2013) *Lives in Peril : Profit or Safety in the Global Maritime Industry?* Basingstoke: Palgrave Macmillan

Walters D, Sampson H, James P, Bhattacharya S, Wadsworth E and Xue, C (2014) Supply chain leverage and regulating health and safety management in shipping. *Regulation and Governance* (submitted).

Weil D (2009) Rethinking the regulation of vulnerable work in the USA: A sector based approach. *Journal of Industrial Relations* 51(3): 411-430.

Weil (2010) *Improving Workplace Conditions Through Strategic Enforcement*. A Report to the Wage and Hours Division. Washington: Department of Labor. May.

Weil D (2011) 'Enforcing labour standards in fissured workplaces: The US experience'. *Economic and Labour Relations Review* 22(2): 33-54.

Weil D (2014) *The Fissured Workplace: Why work became so bad for so many and what can be done to improve it*. Boston: Harvard University Press.

Weil D and Mallo C (2007) Regulating labour standards via supply chains: Combining public/private interventions to improve workplace compliance. *British Journal of Industrial Relations* 45(4): 791–814.

Williamson O (1975) *Markets and Hierarchies: Analysis and Antitrust Implications*. London: Free Press.

Williamson O (1985) *The Economic Institutions of Capitalism: Firms, Markets and Relational Contracting*. New York: Free Press.

Wright C and Lund J (2003) Supply chain rationalization: Retailer dominance and labour flexibility in the Australian food and grocery industry. *Work, Employment and Society* 17(1): 137–157.

Wright C and Brown W (2013) The effectiveness of socially sustainable sourcing mechanisms: Assessing the prospects of a new form of joint regulation. *Industrial Relations Journal* 44(1):20-37.

Xue, C (2012) *Communication and its Role in Influencing Shipboard Occupational Health and Safety Management in Chinese Shipping*. PhD Thesis. Cardiff: Cardiff University.

Notes

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² It remains uncertain, however, how far this duty extends to cover outsourced work undertaken away from the premises of an undertaking. See James et al (2007).

³ The authors are grateful to the two authors for permission to draw upon these data.

⁴ For discussion that shed valuable light on the role of enforcement agencies in such regulatory contexts see Weil (2010) and Hardy and Howe (2014).

⁵ For a historical discussion of the use of trade union enforcement in Australia see Hardy and Howe (2009).